SEQUENCE LISTING

- <120> MYCOBACTERIAL PROTEINS, MICORORGANISMS PRODUCING THEM
 AND THEIR USE FOR VACCINES AND FOR THE DETECTION OF
 TUBERCULOSIS
- <130> 0660-0138-0DIV
- <140> 09/132,528
- <141> 1998-08-11
- <150> 08/641,356
- <151> 1996-04-30
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- <213> Mycobacterium tuberculosis
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- ggtgaatgtg gcgacccacg accgtcgagt cgggctgctg ttgcaagacc cgttgttgtt 180
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gata	cccg	jegi g	gacco	acgg	jt co	tggt	.gcgc	999	catg	atc	agco	tggt	.gg (gege	ctggc	900
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							•							gtt Val		1177
Ala	ren	Ala	20	AIA	Ala	MEL	ATd	25	Ald	ser	ьеи	vai	. 30	vai	AIG	
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Val	Pro			Ala	Asn	Ala		Pro	Glu	Pro	Ala			Val	Pro	
		3.5	•				40					45		·		
aca	acg	gcc	gcc	tcg	ccg	ccg	tcg	acc	gct	gca	gcg	cca	ccc	gca	ccg	1273
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	50					55	-		•		60					
gcg	aca	cct	gtt	gcc	ccc	cca	cca	ccg	gcc	gcc	gcc	aac	acg	ccg	aat	. 1321
Ala	Thr	Pro	Val	Ala	Pro	Pro	Pro	Pro	Ala	Ala	Ala	Asn	Thr	Pro	Asn	
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gcc	cag	ccg	ggc	gat	ccc	aac	gca	gca	cct	ccg	ccg	gcc	gác	ccg	aac	1369
Ala	Glņ	Pro	Gly	Asp	Pro	Asn	Ala	Ala	Pro	Pro	Pro	Ala	Asp	Pro	Asn	
	•		,	85					90					95		•
														_	* *	
_	_	_												gtc		1417
Ala	Pro	Pro	Pro	Pro	vaı	тте	AIA	Pro	Asn	Ala	Pro	GIN	1.10	Val	arg	

								agc Ser								1465
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				Val					Thr					Va]	g gac L Asp	1897
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		Pro					Ala					Ala			g ccg a Pro	1993

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Thr Thr Ala Ala Ser Pro Pro Ser Thr Ala Ala Ala Pro Pro Ala Pro 50 55 60

Ala Thr Pro Val Ala Pro Pro Pro Pro Ala Ala Ala Asn Thr Pro Asn 65 70 75 80

Ala Gln Pro Gly Asp Pro Asn Ala Ala Pro Pro Pro Ala Asp Pro Asn 85 90 95

Ala Pro Pro Pro Val Ile Ala Pro Asn Ala Pro Gln Pro Val Arg
100 105 110

Ile Asp Asn Pro Val Gly Gly Phe Ser Phe Ala Leu Pro Ala Gly Trp
115 120 125

Val Glu Ser Asp Ala Ala His Phe Asp Tyr Gly Ser Ala Leu Leu Ser 130 135 140

Lys Thr Thr Gly Asp Pro Pro Phe Pro Gly Gln Pro Pro Pro Val Ala 145 150 155 160

Asn Asp Thr Arg Ile Val Leu Gly Arg Leu Asp Gln Lys Leu Tyr Ala 165 170 175 Ser Ala Glu Ala Thr Asp Ser Lys Ala Ala Arg Leu Gly Ser Asp . 190 180 185 Met Gly Glu Phe Tyr Met Pro Tyr Pro Gly Thr Arg Ile Asn Glu Glu 200 195 Thr Val Ser Leu Asp Ala Asn Gly Val Ser Gly Ser Ala Ser Tyr Tyr 220 215 210 Glu Val Lys Phe Ser Asp Pro Ser Lys Pro Asn Gly Gln Ile Trp Thr 230 235 225 Gly Val Ile Gly Ser Pro Ala Ala Asn Ala Pro Asp Ala Gly Pro Pro 250 245 Gln Arg Trp Phe Val Val Trp Leu Gly Thr Ala Asn Asn Pro Val Asp 270 265 - 260 Lys Gly Ala Ala Lys Ala Leu Ala Glu Ser Ile Arg Pro Leu Val Ala 280 275 Pro Pro Pro Ala Pro Ala Pro Ala Pro Ala Glu Pro Ala Pro Ala Pro 295 300 290. Ala Pro Ala Gly Glu Val Ala Pro Thr Pro Thr Pro Thr Pro Gln 310 315 320 305 Arg Thr Leu Pro Ala 325 <210> 3 <211> 325 <212> PRT <213> Mycobacterium tuberculosis <400> 3 Met His Gln Val Asp Pro Asn Leu Thr Arg Arg Lys Gly Arg Leu Ala 10 5 Ala Leu Ala Ile Ala Ala Met Ala Ser Ala Ser Leu Val Thr Val Ala 25 20

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Ala 65	Thr	Pro	Val	Ala	Pro 70	Pro	Pro	Pro	Ala	Ala 75	Ala	Asn	Thr	Pro	Asn 80
Ala	Gln	Pro	Gly	Asp 85	Pro	Asn	Ala	Ala	Pro 90	Pro	Pro	Ala	Asp	Pro 95	Asn
Ala	Pro	Pro	Pro 100	Pro	Val	Ile	Ala	Pro 105	Asn	Ala	Pro	Gln	Pro 110	Val	Arg
Ile	Asp	Asn 115	Pro	Val	Gly	Gly	Phe 120	Ser	Phe	Ala	Leu	Pro 125	Ala	Gly	Trp
Val	Glu 130	Ser	Asp	Ala		His	Phe	Asp	Tyr	Gly	Ser 140	Ala	Leu	Leu	Ser
Lys 145	Thr	Thr	Gly	Asp	Pro 150	Pro	Phe	Pro	Gly	Gln 155	Pro	Pro	Pro	Val	Ala 160
Asn	Asp	Thr	Arg	Ile 165	Val	Leu	Gly	Arg	Leu 170	Asp	Gln	Lys	Leu	Tyr 175	Ala
Ser	Ala	Glu	Ala 180	Thr	Asp	Ser	Lys	Ala 185	Ala	Ala	Arg	Leu	Gly 190	Ser	Asp
Met	Gly	Glu 195	Phe	Tyr	Met	Pro	Tyr 200		Gly	Thr	Arg	Ile 205	Asn	Gln	Glu
Thr	Val 210		Leu	Asp	Ala	Asn 215	Gly	'Val	Ser	Gly	Ser 220		Ser	Tyr	Tyr
Glu 225	Val	Lys	Phe	Ser	Asp 230	Pro	Ser	Lys	Pro	Asn 235		Gln	Ile	Trp	Thr 240
Gly	Val	Ile	Gly	Ser 245	Pro	Ala	Ala	Asn	Ala 250		Asp	Ala	Gly	Pro 255	
Gln	Arg	Trp	Phe 260	Val	Val	Trp	Leu	Gly 265		Ala	Asn	Asn	Pro 270		Asp
Lys	Gly	Ala 275		Lys	Ala	Leu	Ala 280		Ser	Ile	e Arg	Pro 285		Val	Ala

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Arg Thr Leu Pro Ala 325

<210> 4

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<212> PRT

<213> Mycobacterium tuberculosis

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Ser Thr Ala Ala Pro Pro Ala Pro Ala Thr Pro Val Ala Pro Pro 20 25 30

Pro Pro Ala Ala Ala Asn Thr Pro Asn Ala Gln Pro Gly Asp Pro Asn 35 40 45

Ala Ala Pro Pro Pro Ala Asp Pro Asn Ala Pro Pro Pro Pro Val Ile 50 55 60

Ala Pro Asn Ala Pro Gln Pro Val Arg Ile Asp Asn Pro Val Gly Gly 65 70 4.3. 75 80

Phe Ser Phe Ala Leu Pro Ala Gly Trp Val Glu Ser Asp Ala Ala His 85 90 95

Phe Asp Tyr Gly Ser Ala Leu Leu Ser Lys Thr Thr Gly Asp Pro Pro 100 105 110

Phe Pro Gly Gln Pro Pro Pro Val Ala Asn Asp Thr Arg Ile Val Leu 115 120 125

Gly Arg Leu Asp Gln Lys Leu Tyr Ala Ser Ala Glu Ala Thr Asp Ser 130 135 140

Lys Ala Ala Ala Arg Leu Gly Ser Asp Met Gly Glu Phe Tyr Met Pro 145 150 155 160

Tyr Pro Gly Thr Arg Ile Asn Gln Glu Thr Val Ser Leu Asp Ala Asn 165 170 175

Gly Val Ser Gly Ser Ala Ser Tyr Tyr Glu Val Lys Phe Ser Asp Pro 180 185 190 Ser Lys Pro Asn Gly Gln Ile Trp Thr Gly Val Ile Gly Ser Pro Ala 195 200 205

Ala Asn Ala Pro Asp Ala Gly Pro Pro Gln Arg Trp Phe Val Val Trp 210 215 220

Leu Gly Thr Ala Asn Asn Pro Val Asp Lys Gly Ala Ala Lys Ala Leu 225 230 235 240

Ala Glu Ser Ile Arg Pro Leu Val Ala Pro Pro Pro Ala Pro Ala Pro 245 250 255

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